Market-based Innovation for Sustainable Competitive Advantage

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Abstract-- **New technology and product-based innovation are an important catalyst for new markets. However, as nascent markets mature, imitation becomes rampant, products become more commoditized, and firms must shore-up their value proposition to avoid strictly cost-based (scorched earth) competition.**

The term used in Marketing to describe this is "differentiation". The essence of differentiation is turning the dials of the marketing mix (product, people, price, place, promotion) to create an offering that is the most attractive to current or potential customers.

In order to differentiate, the mix must be "different" in a very good way - that means in a way that is both important and valuable. Creating this type of game-changing differentiation requires innovation - creating unique offerings with an unmatched and previously unseen value proposition. This process is called market-based innovation.

When market-based innovation is based on the core competencies of an organization then it can also lead to sustainable competitive advantage. Of course, sustainable competitive advantage is the key to market domination over the long haul.

In this paper we will discuss several examples of successful market-based innovations and explore techniques for putting these principle to work in any organization.

> *Innovation is defined as "the development and implementation of new ideas by people who over time engage in transactions with others within an institutional order. " [53]*
> Andrew Van De Ven

In traditional academic literature this tends to be a fairly standard style of definition for innovation. The basic idea is that an innovator takes an idea for a new product or service (invention), or finds a new twist on an existing product or service, and turns it into an "offering" that provides economic benefit.

Of course, this definition is still not very precise. This is not unusual in practice; ask twelve experts what innovation means and they are likely to give you a dozen (or more) different answers. One reason for that is that innovation is an incredibly broad topic that spans virtually every discipline, profession, and activity. Consider the artist that decides create new works using used chewing gum in many colors as the medium. The home cook who discovers a way to make edible Imperial Storm Troopers using puffed marshmallows – to the delight of her children. Or the first child who figured out that if they attached playing cards to the wheels of their bike it would sound like a top fuel dragster (to them).

Aren't these all forms of innovation in the common sense of the word? Even our pedestrian experience tells us that innovation comes is all shapes, sizes, and forms. In fact, if we explore the original Latin root we find no (explicit) tie to economic outcome at all.

However, in business and economics this topic takes on added importance based on the fact innovation and entrepreneurship provide the backbone for the growth of our economy. Given the expanse of the topic we will start by defining "commercial" innovation as follows:

> *[Commercial] "Innovation is the discovery (accidental or systematic), development, and implementation of new ideas that add economic value for a commercial enterprise or entrepreneur."*

This definition borrows from the more general one above and makes it clear that we are focused on new ideas that provide a commercial benefit. In this case commercial benefit can take the form of increased sales, reduced expenses, or competitive/strategic advantage or response.

This definition mirrors what is most often discussed when the topic of innovation comes up in a business setting or business school curriculum. However, there is one other item that is usually implied. The unspoken assumption is that innovation takes the form of a product or service, or an improvement in the value chain, which translates into a new product or service offered by a supplier(s). We can also consider innovations that take the form of process enhancements that ultimately improve the quality or reduce the price of an existing product or service.

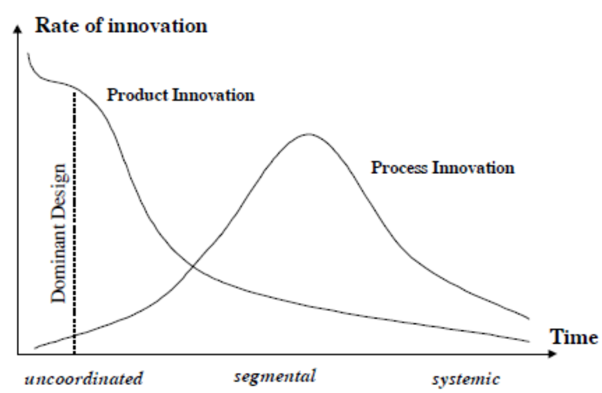


Figure 1: Utterback & Abernathy's model of industrial product and process innovation
(Utterback, Abernathy [52]; modified by Milling, Sumpfe [29])

In fact, Utterback and Abernathy, show that within a specific S curve for a product or service there are likely to be more product-focused innovations when a market/offering is first introduced; with a greater number of process innovations over time as the market/offering becomes more mature [52]. This thinking aligns well with the idea of increasing economies of scale and reducing prices over time to combat imitative competitors. Of course, we still try to maintain value with incremental innovations to the product offering; but, our focus is cost reduction to preserve margins in the face of competition.

In a mature commodity market the most efficient (low cost) producer usually prevails which leans heavily on process innovation and advances in the supply chain rather than product innovation. This also leads naturally to topics such as collaborative product and process innovation or design for manufacturability. However, the focus remains the same, innovation based on new products or processes. The problem is that this ignores a number of fertile areas for innovation that we will outline further in this paper.

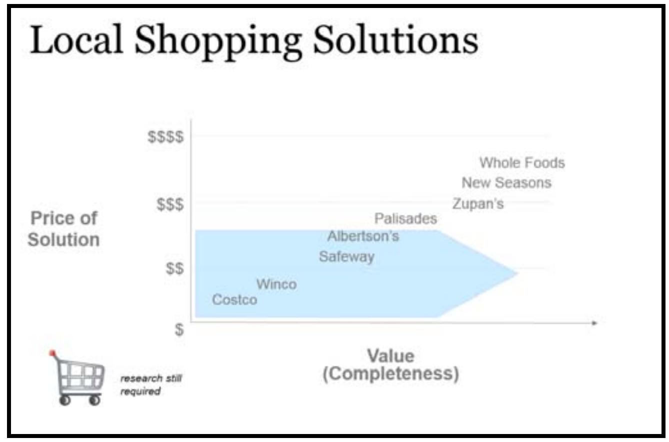
This limiting view was brought into focus recently when asked to come up with an innovation based on my normal daily experiences. The resulting idea was a grocery store with extreme discount pricing like Costco (www.costco.com) or Winco (www.wincofoods.com); yet with a wider variety of quality products like Whole Foods (www.wholefoodsmarket.com) or New Seasons (www.newseasonsmarket.com).

We can explore the premise for this new business idea by plotting the competitive players on two axis – the horizontal represents the (economic) value or completeness of the solution – the vertical represents the price of the solution (figure 2a). Generally speaking, a solution that is more complete, or offers greater value, is usually priced higher to capture that extra value from the customer.

However, in practice what we sometimes see is when companies continue to add incremental features, and they pursue economies of scale (process efficiency) at the same time, they can create a solution with both higher value at a lower cost than current competitors. This occurs when an offering occupies a space on the horizontal axis that is below, or to the right of a competitor, for any point on the vertical axis that represents the price of the solution. This is what Christensen [11][12][13], and later Lambert [30], would refer to as disruptive innovation.

The central idea of the supermarket offering was to create an alliance with one of the high volume players like Costco or Winco and use their buying power to stock the shelves of the new store with a similar variety of products as the boutique markets at a much lower cost. To the extent that only smaller communities are targeted, markets that are too small to support a full-blown warehouse store like Costco or Winco, we post no (near-term) competitive threat to them, and our sales will help drive additional volume, which lowers their costs and gives them a further advantage in their target markets – the market needs of both firms (buyer & supplier) are in strategic alignment.

This new supermarket offering is outlined in the diagrams below (Figure 2b). When using this model, an offering that occupies the space below, or to the right of competitive offering, for any price point along the vertical axis, is said to be a superior competitive solution. A superior competitive solution is well positioned to eliminate less efficient players that occupy regions directly above them in this model.



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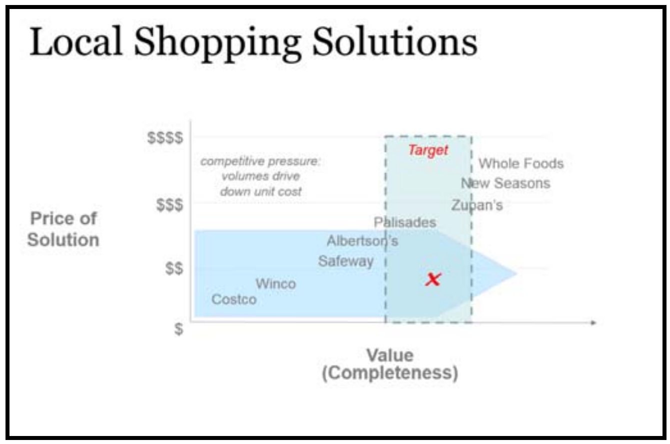

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Figure 2: Innovative Supermarket Offering

Even though this idea clearly satisfies the tenants of disruptive innovation as shared by Christensen and Lambert, it was still dismissed by many of my colleagues as not very "innovative". Ironically, most admitted that they would shop at a store like this if it existed. The other dynamic they did not fully comprehend is that I've spent the bulk of my career managing strategic alliances with some of the largest companies in the world. In other words, the design above takes advantage of a personal core competency that is valuable, rare, costly to imitate and non-substitutable – it is both strategic and sustainable. That succinctly captures the essence of this paper.

What my colleagues were really looking for instead was new "design" – images of a store with organic vegetables grown in-house in hydroponic gardens where consumers can pick right from the plant; or test kitchens where consumers could learn about new cuisines and someone from the store would shop for the ingredients and load them in the car while they learn, …

This concentration on "product design" as the focal point of innovation is highlighted in publications such as the work by Tim Brown, co-founder of Ideo (www.ideo.com), one of top design firms in the world. In fact, his very widely read book, Change by Design [8], carries the following phrase on the front cover: "How Design Thinking Transforms Organizations and Inspires *Innovation*".

The central idea of the book is that by hiring a diverse group of creative people, providing a "creative" environment, and following a few simple principles, we should be able to come up with great "designs" which can serve as the foundation for "innovation". Ideo provides many examples of innovative "design" and a design process that often (though not always) leads to commercial success. Of course, the only actor that never loses in this scenario is the design firm – they still get paid, hit or flop.

Life would be very simple indeed if all we have to do is recruit a room full of ill mannered and oddly dressed creative types; fill it with color, unusual toys, and unexpected props; and innovative ideas would gush from the floor right where we stand. We might even be able to sprinkle in a free lunch or two prepared by the corporate chef. That certainly wouldn't explain the success of firms like 3M, Intel, IBM, GE, Disney, and *most* others; although it would make life at all these firms a lot more colorful if true!

In more recent literature there is now a recognition that innovation can take on a broader spectrum of forms. Since we operate in an increasingly service-based economy most modern definitions now include the idea of innovative products *or services* – in a service-based economy services are products.

The concept of innovation is extended still further by some to offer the idea of "business model" innovation. Skarzynski and Gibson [49] define a business model as "a conceptual framework that describes how a company creates, delivers, and extracts value". When making this extension we can explore different business models or strictly focus on innovating the revenue model (e.g. how we make money) which is a narrower focus than the entire business model.

Some in industry extend this further so that innovation can take four forms: product or service innovation, process innovation, business model innovation, and technology [28]. Searching for even more clarity ex-McKinsey consultant and industry luminary, Idris Mootee [31], proposes a model with eight different facets of innovation.

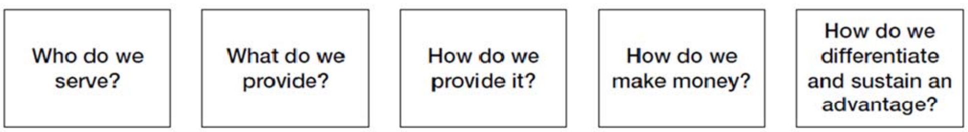

Figure 3: Unpacking the Business Model (Skarzynski, Gibson [49])

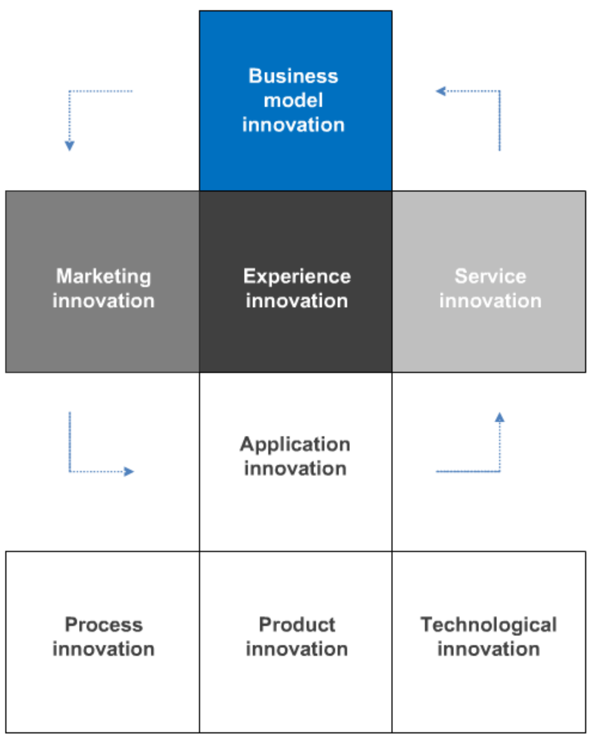

Figure 4: Types of Innovation (Mootee [31])

The second edition of the Oslo Manual [34], a detailed set of guidelines for measuring innovation, widely used in Europe and the United States, provides this definition:

> *"A technological product innovation is the implementation/commercialisation of a product with improved performance characteristics such as to deliver objectively new or improved services to the consumer. A technological process innovation is the implementation/adoption of new or significantly improved production or delivery methods. It may involve changes in equipment, human resources, working methods or a combination of these*."

This definition is general in nature and reflects the traditional view that innovation takes the form of a product or process innovation. The focus of this definition is also on both *technological* innovation and on enhancements that have been *implemented* or commercialized. The third, and latest, edition of the Oslo Manual [35], provides an expanded definition to keep pace with current thinking.

> "*An **innovation** is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method inbusiness practices, workplace organisation or external relations*."

Similar to the second edition, this definition is broad-based and expected to be expanded or trimmed as needed to meet the needs of specific research. While this definition does remove the emphasis strictly on technological innovation; it still requires implementation or commercialization; and they attempt to maintain consistency with the older version. In the 2005 manual they call out four types of innovation: *product innovation, process innovation, marketing innovation*, and *organizational innovation [35]*.

Product and process innovation are similar in concept to what we would expect, though there is not a stipulation that enhancements consist of technology alone.

The manual calls out a *marketing innovation* as "*implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing*." Of course, this introduces some overlap with product innovation – there is also not much guidance on what constitutes a "significant change" rather than an insignificant one. In this definition, a marketing innovation need not be a completely new idea, even if a competitor in the industry is already using it, it just needs to be new to the company now implementing it [35].

O*rganizational innovation* is referred to as "*implementation of a new organizational method in the firm's business practices, workplace organization, or external relations*." Once again, the distinguishing feature is that it requires implementation of an organizational method that has not been used by the firm before and is based on a conscious "strategic decision by management" [35].

Offering yet another point of view, the Doblin Group [16] offers up a widely referenced taxonomy with 10 separate categories of innovation.

These innovation concepts are captured in a book written by Larry Keeley, co-founder of the Doblin Group, called "Ten Types of Innovation, The Discipline of Building Breakthroughs" [27]. These categories are based on the major areas of finance (business model, networking), process (enabling process, core process), offering (product performance, product system, service), and delivery (channel, brand, customer experience). This certainly covers a broader range than earlier definitions.

Of course, the literature abounds with many versions of the traditional product/process definition; however, we are starting to see a recognition that innovation involves much more. To illustrate, the latest Oslo manual, as well as the models put forth by Mootee and Keeley, recognize that the concept of innovation is not just focused on technology and extends well beyond product and process design.

With that said, most still seek to impose order on this topic by stacking new boxes (or terms) on top of older boxes without providing an operational model that will help us drive innovation. There is also no explicit recognition of how these different forms of innovation relate or even complement each other. A new market offering in today's complex competitive marketplace is likely to have innovation on multiple fronts based on the core competencies (strategic capability) of the firm offering the solution.

The reality is that we can "innovate" in any number of ways based on the core elements of our product offering and the resources and core competencies available to the firm. In order to anchor this concept with a simple conceptual framework we can define innovation using the Strategic Marketing Model [56]. This model has been used successfully in many consulting engagements since 2003. Additional details on the form and function of this model can be found in the webinar posted at: http://www.cendix.com/press/boostsaleswebinar.html.

The Strategic Marketing Model (SMM) defines every product in the marketplace in terms of the essential marketing elements required to deliver it: product, people, price, place, and promotion; taking into account both strategy and brand. However, in order to get the complete picture we need to start by defining what we mean by the word "product".

One common mistake is to define a product only in terms of the tangible "device" or "object" that is exchanged in the transaction between buyer and seller. Just to illustrate, when a customer buys an automobile is the physical vehicle all they are buying?

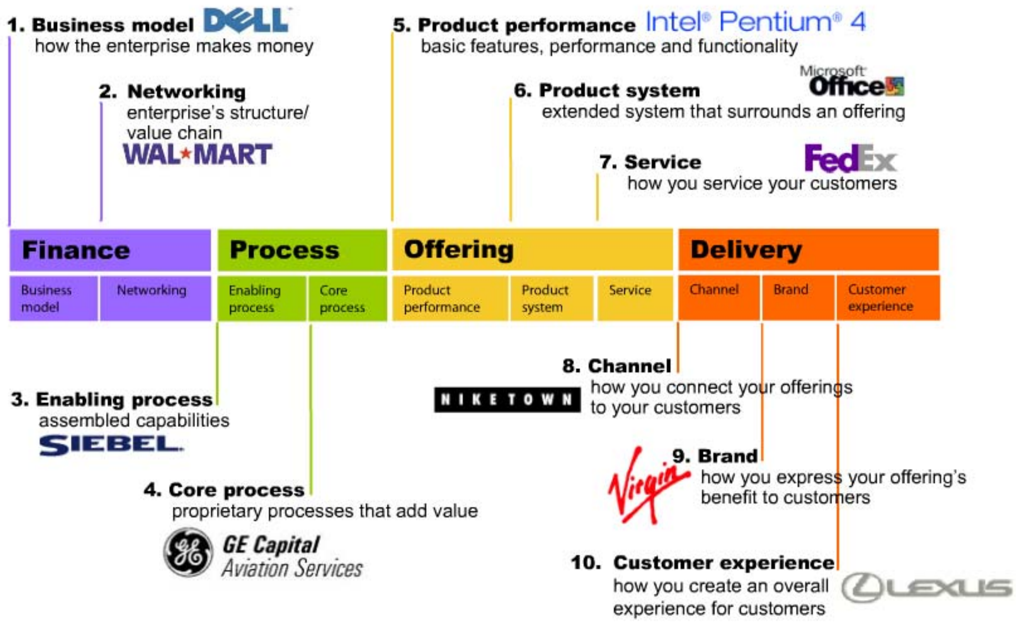

Figure 5: Taxonomy of Business Innovation (Doblin Group [16])

Figure 6: The Strategic Marketing Model (Zehr 2003)

Sure, they were attracted by the styling, color, options, and price. However, elements such as warranty, cost of ownership, dealership location, rapport with the sales team, selection, and a host of others all play a role as well. In some dealerships they provide a place where children can play while the parents take a test drive and hammer out the terms of *the deal*. Some dealerships have the ability to locate financing and close *the deal* instantly – even when the customer has a bruised credit history – and even after hours, or on a Sunday, when the banks are closed.

Volvo has built a very solid brand based on the safety of their automobiles. Of course, the safety rating of a Volvo has a much to do with the driving habits of all current and past owners of the vehicle, as any feature Volvo chooses to include. What about brands such as Mercedes or BMW that offer an aura of exclusivity and engineering excellence to new owners? These attributes come with the brand that the company attaches to the "offering" - not the padded steel box rolling off the lot.

Davidow [14] makes the point that the term product should be defined much more broadly. The term product used in the traditional 4 P's marketing mode, and the Strategic Marketing Model, must include "all" the costs, benefits, and privileges that accrue to the customer.

When using the term people in the Strategic Marketing Model, we are referring to the market niche that the firm has chosen to target for their sales efforts. Rolex targets an affluent consumer who wants to telegraph their success to others based on their time piece; Timex offers a reliable "value" to more utilitarian consumers with less to spend or less inclination to show it off. Of course, there are lots of ways that we can describe these place niches using demographics or psychographics.

Price refers to the monetary price requested from buyers in the marketplace. This is the effective price and needs to take into account discounts, financing, or trade promotions. This element can overlap with strategy at times; for example, if we are using premium pricing to "skim the cream" or discount pricing to drive our economies of scale and near-term growth of market share.

Promotion is the awareness we create in the marketplace using techniques such as advertising, public relations, endorsements, or others. Promotion lets people know that we have an offering, helps them understand why it is valuable/unique, and motivates buyers to take action.

Place refers to the channels we use to sell our product or service. Channels can be direct, as when the Fuller Brush person shows up on your doorstep, or they can be indirect through a channel partner such as a retail store. Of course, companies need not hitch themselves to a single channel, they can adopt a multi-channel strategy as well. With the rise in popularity of the Internet, we also see many companies who would traditionally sell through "channels" take their products and services direct to the customer using eCommerce tools.

Since *the market offering* is ultimately what we deliver to the customer, and since it is the complete bundle of attributes (5 P's + strategy + brand) that form the basis for the competitive evaluation and purchase decision; it follows that any of these attributes (alone or combined) can also be a source of innovation and/or competitive advantage. In marketing, when we turn the dials of the marketing mix, we call this positioning. When we create innovative new ideas, or take innovative new approaches, to any element(s) of *the market offering*, we call this *market-based innovation*.

This begs the question, if we pursue market-based innovation, *which we must*, then how do we get from there to sustained competitive advantage? In the business strategy literature there are two widely accepted techniques for determining where a company should focus to establish sustainable competitive advantage: the industrial organization model and the resource-based model.

In the Industrial organization (I/O) model we start with the assumption that factors in the external and industry environment dictate a winning strategy. The firm needs to carefully analyze these factors, choose a defensible market (product) position, and then acquire the resources required to implement this chosen course of action. In particular, we need to analyze the political, economic, sociocultural, technological, ecological, and legal aspects of the environment (PESTEL); along with industry attributes; and close competitors in the market [47].

One popular model used to identify attractive markets in this analysis is Porter's five forces of competition model [39][40]. This model considers each market in terms of the power of suppliers, the power of buyers, barriers to entry, threat of substitutes, and competitive rivalry. In some contemporary versions we also consider the role of government in the market. If we can select markets/segments with defensible barriers and few substitutes, where buyers and suppliers have little power, and competitive rivalry is light, the potential for above average returns in greater. Of course, not all situations are as clear cut as this, so judgement is required to gauge the relative importance of each element for a specific market.

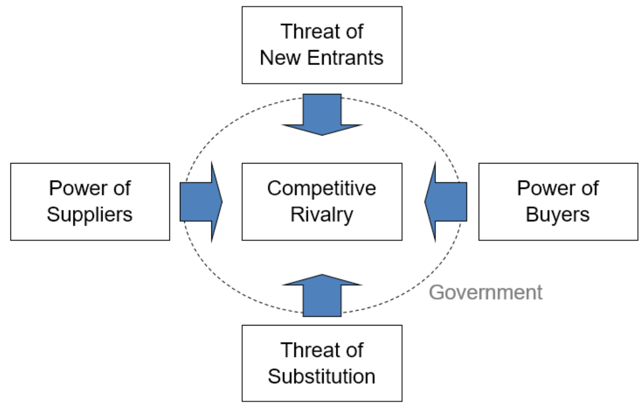

Figure 7: The Five Forces Model [39][40]; Government added

With the resource-based model we take the opposite approach. We start by examining the assets of the business (tangible + intangible). We also explore our capabilities – the abilities we have that convert resources into products or actions. In particular, we are looking for core competencies – these are capabilities that are valuable, rare, costly to imitate, and non-substitutable. Core competencies are the foundation for sustainable competitive advantage [25][4].

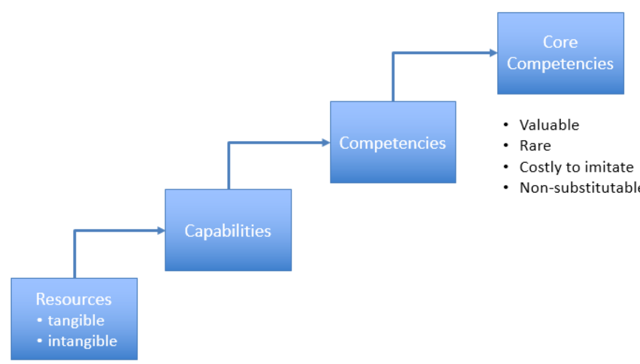

Figure 8: Resource Based Model (Hitt, Ireland, & Hoskisson [25])

In practice these two approaches are not used in isolation. These two models give us views that are like two different sides of the same coin – they complement each other. This means that we are seeking innovations, in attractive industries/markets, based on new or existing core competencies, which form the basis for sustained competitive advantage. If we can find innovations that also allow us to enter a market in a niche that will shelter us from incumbents while we grow, as outlined in the supermarket example, then we arrive at market altering disruptive innovation [11][30].

The focus of the remainder of this paper is to explore each of the elements of the strategic marketing model and find examples of companies that have made significant "innovations" based on different attributes to gain (sustain) competitive advantage.

As we cover these examples, keep in mind that not all innovative products are a "pure play" innovating along only one vector. Often companies combine innovation within multiple elements in a new and unique way to come up with a unique "mix" – that is the nature of innovation and marketing. However, in this analysis we are trying to identify the primary vector for innovation.

Product: Apple

The poster child for product-based innovation is Apple. Over the last 15 years Apple has transformed itself from a struggling personal computer company battling to reach even 10% market share into one of the hottest consumer electronics companies in the world. When Steve Jobs returned to the company in 1996 the company introduced the iMac a fully integrated translucent computer that was an instant success with consumers. Competition in the PC industry was based on price and performance at that time – the offering with the highest performance for the lowest price usually won. Apple changed that landscape by using "design thinking" to offer a premium priced product that was "cool". These products typically cost more, but offer less in the way of configuration choices, software applications, processing power, or industry compatibility – illustrating the "value" of design.

Apple has continued to innovate along the lines of product design and enjoyed great success. The company introduced the iPod in 2001 in companion with iTunes. The company followed that with the introduction of the iPhone in 2007 and the iPad in 2010. These product lines have continued to redefine Apple; in fact, less than 30% of Apple's revenue now comes from personal computers and it is shrinking even further. Apple now has a larger market capitalization than Microsoft, with a fraction of the revenues, largely based off of their ability to deliver "cool" consumer electronics designs.

When we think of product innovation in this model we also have to consider process innovation – or the drive to make delivery more efficient over time. In this case, Apple out-sources most of their production and focuses on premium priced products so they can pay less attention to process innovation. However, with more traditional manufacturing-based firms we would expect to see more process-based advances as proposed by Utterback and Abernathy [52].

People: McDonalds

One example of innovating based on the concept of people (niche marketing) is McDonald's. It is hard to imagine many products less ripe for ground-breaking product innovation. Ray Kroc didn't create McDonald's as a new restaurant theme – he purchased it from the original founders. The name of the primary product defines it – most consumers have a pretty good idea what a hamburger, or fries, should be. Sure, we can stack the number of patties, we can top it with different styles of cheese, add some bacon or other condiments, but none of these really blows the top off the innovation meter. Sure, McDonald's offers lots of items such as salads now, but that was not as true when they first entered the market. In 1954 babies were booming, the interstate highway system was just taking shape, and families were taking to the road.

McDonald's took a different approach than most by targeting kids and selling "fun". They introduced Ronald McDonald, Mayor McCheese, the Hamburglar and other characters that played well to kids. They added play structures to the restuarants. The played up the idea that McDonalds was a "happy" place. The result is that when parents rolled by a McDonald's the kids begged for a "happy meal". Contrast this with their closest competitor Burger King. Their tagline was "have it your way" and they underscored the benefit of being "flame broiled" – product-based innovation. Do consumers go to fast food restaurants in search of gourmet cuisine?

In this case, the focus on people (target niche) rather than product has paid off handsomely for McDonald's. They are now the largest fast food chain in the world with over 32 thousand restaurants, in 117 countries, with over $72 billion in annual sales [44]. They have also recently revised their marketing to target an older more affluent baby boomer.

Just as a counterpoint to the approach McDonald's took to the burger (fast food) market; consider for a moment the example of Red Robin Gourmet Burgers. This company redefined the humble hamburger into a sandwich on which they offer versions with beef, chicken, or fish with a wide variety of different condiments that change seasonally or with consumer trends. Today the company operates 439 Red Robin restaurants, in 40 states, with just under a billion dollars in annual revenue [42]. Quite a performance for a company that started as a tavern and opened its first Red Robin restaurant in 1969 [43]. Of course, this organization is following a route much closer to product-based innovation.

There are many examples of other firms who also take this approach. Curve's provides health clubs and exercise programs for women. There are only so many exercises in existance, and a limited number of machines available on the market, but Curve's has created a program that caters specifically to women – a niche market. We can also consider retail stores such as REI (cooperative outdoor store) and Whole Foods that offer a collection of goods that appeal to a very specific market. The primary differentiator is that these establishments pull together all the products that apeal to a specific audience.

Price: Southwest

Southwest Airlines has refined low cost airfare to an art form. The company started out by identifying their primary competitor as the automobile. Unlike the larger airlines that fight for the high-margin business traveler, cross country, or event international traffic, Southwest has historically focused on low-priced short-run regional family transportation. The company has standardized on a single aircraft reducing the cost of maintenance and operation; uses only second tier airports where the gate fees are lower and the turn times are faster; uses fuel contracts to manage the cost of fuel; and tries to avoid using ticketing networks to eliminate booking fees. The entire company is based around the idea of operating cheaply to support low fares. Based on this model Southwest consistently posts a profit in an industry where the top firms lose money year after year [23].

The example of price based innovators does not stop there. Consider the example of Wal-Mart. The company started as a small five and dime and Sam Walton turned it into the largest retailer in the world by focusing on offering the lowest prices possible [6]. In fact, when Wal-Mart comes to town they often put small local incumbents out of business because they can't compete. Costco also focuses on reducing costs by requiring a membership and then only selling to customers in bulk (wholesales). This is another model that has been wildly successful. Some other examples of this approach are illustrated by Geico Insurance, Acer (netbook computers), and Taco Bell.

Place: Dell Computer

Michael Dell started Dell Computers in 1983 working out of his dorm room at University of Texas with a $1,000 investment. Today Dell Computer is a Fortune 500 company with over $60 billion in revenues and until recently was the largest PC company in the United States. The company got its toe-hold by offering built-to-order PC's mail-order using industry standard components. While other companies like Compaq and IBM were investing in custom engineering, and pumping the channel full of product, Dell was able to minimize R&D investment and working capital by serving companies over the phone. When the Internet became popular Dell was quick to embrace this new distribution channel as well [45].

However, Dell is not alone in using channels as a focus for innovation. There is a whole generation of Internet businesses that have adopted a similar focus: eBay, Craig's List, and Amazon (among others). The basic idea for these businesses is not new; in fact, most do not use not have earth shattering technology, they simply leveraged a product idea that worked in the offline world, and then glued it a web-based front-end. In the case of Amazon, they take a step further by using additional information technology to become more efficient with fulfillment and delivery.

Other examples would include Kinko's (Federal Express Office) with over 1,000 locations; food carts in Portland that dot the landscape in strategic clusters, or the gift shop at a remote tourist destination.

Promotion: Subway

One of the most visible recent examples of innovation primarily on the promotion front is Subway. The company first tried leading with "eat fresh" pitching the sub sandwich as a healthy alternative to fast food. The company even enlisted the help of Jared, an individual that shed 245 pounds with the help of a diet of subway sandwiches and walking [3]. Once again, from the earlier example of McDonald's we understand the pitfalls of trying to sell *great* food to people looking for *fast* food.

However, the company switched to their $5 foot long message in 2008 [3]. The jingle was blasted relentlessly over TV to the point that kids were humming it in school and adults were singing it in the shower. Nothing at all had changed about the product, in fact, $5 is not the cheapest fast food around, but based on aggressive promotion they were able to take it to competitors like Quizno's [5].

This was in the depth of the recession, consumers were cost conscious, Quizno's had a higher priced offering that used more expensive ingredients – because of their target market they were also in higher end (more expensive) locations [5]. Still the company tried to fight back with a $5 sandwich offering of their own. The result, Quizno's filed for bankruptcy in 2014, and Subway is back to pitching fresh, in the face of much less forceful competition.

One other prime example of this type of innovation is Nike. Sure, Nike makes a fine athletic equipment, but they were also the first to lock down industry giants like Michael Jordon, Michael Vick, Tiger Woods, and many others to serve as spokespeople for their company [46]. As we can see with recent press there are some risks that also come with this strategy – you get the good with the bad. But, in general, each of these individuals is a unique personality that can move hundreds of millions of dollars of inventory for them. Does Nike make the best golf club in the world? Probably not, but if Tiger Woods is going to use them, and he wins tournaments with them, others will line up to buy them too.

Of course, there are many other examples of this type of innovation such as the 2009 3G coverage map campaign offered up by Verizon wireless. Their campaign was built on coverage maps that said they were much better than AT&T. They drove this point home again and again. Of course, with the peering arrangements in the cellular industry today, competitors allow traffic across their networks, expanding reach with a lot less expense. Thus, comparing coverage maps in this context becomes problematic. AT&T took issue with this approach and sued Verizon in 2009 [51]. In the meantime, it did spark a lot of interest in Verizon and it put AT&T on the defensive so that they had to run thousands of their own response ads. With that one campaign, Verizon moved from a follower's position to a leader's position, and brushed AT&T back on their heels.

Strategy: Microsoft/Mozilla

Netscape Communications was started in 1994 to sell a commercial version of the web browser spawned by Mosaic in the university environment. Netscape developed rapidly as the popularity of the Internet expanded and Netscape commanded over 80% of the market by 1995. Of course, the rapid rise of the Internet, and the popularity of Netscape for accessing it, caused some fear among the ranks in Redmond, WA – if the browser was truly the next "desktop" then Microsoft needed to own it.

With the launch of Windows 95 the same year Microsoft launched Internet Explorer (IE). However, there were two key differences. First, IE was free and could be downloaded for no charge. Second, IE shipped with the operating system, and so it was pre-installed on most new PC's.

The initial IE offering was technically inferior to Netscape, but both companies continued to add features at a rapid pace, and Microsoft soon overcame any technical advantages. Based on the steady erosion of Netscape's market share the company announced in January 1998 that they would give their browser away for free too and move to an open source development process. Of course, the combination of dwindling market share and little revenue turned out to be the death of Netscape. Netscape was acquired by AOL at the end of 1998 for $4.2 billion.

Netscape continued to operate as Mozilla (mozilla.org) within AOL until July 2003 when it was rolled out into a non-profit foundation with seed funding from AOL. The company launched its first new browser in September 2002 (beta); a product subsequently to be renamed Firefox. Google released their own free browser called Chrome in 2009. The market shares of Firefox and Chrome is almost exactly the reverse for those two as it was in 2010 – Internet Explorer is close to the same [32]. At this point in time, 2015, IE holds 55.8% of the market; Chrome (Google) is 25.68%; Firefox is 11.70%; and Safari (Mac) is 5.12% [41].

One significant factor related to this market is that all these products are offered free – to compete with IE. While Microsoft chose to compete on business model with Netscape rather than product (technology); Mozilla used technology (with free) to pull market share away from IE. Interestingly enough, Chrome has been using product (speed with free) to chip away at both offerings but has not managed to unseat IE.

There have been many innovations with respect to business/revenue model over the last two decades; especially given the emergence of the World Wide Web. We can expect the pace of change along this vector to continue to change rapidly as competitors juggle for position.

Brand: Intel

There is no question that Intel is one of the most innovative companies in the world when it comes to technology (product). However, their biggest innovation from a competitive standpoint may have actually have been related to brand rather than product. In the 1980's and early 1990's technology vendors engaged in the processor wars. Intel was dominate in the PC market; however, outside of PC's the market was fragmented, with offerings from Motorola, National Semiconductor, IBM, Digital Equipment Corporation, IBM, MIPS, HP, Sun, and others. The most troublesome element from Intel's perspective was that it gave its chips numbers as was the custom in the industry; starting with the 8086, 80186, 80286, … with numbers incrementing with subsequent releases. Yet a ruling from the courts determined that the company could not trademark model numbers. This made it easy for other firms (particularly their primary competitor AMD) to launch and promote x86 based offerings since Intel did not have the ability to trademark their product names.

At that point in time most consumers had no idea (really) what a CPU was or why they are critical for performance. This made it even more difficult to differentiate in the marketplace and maintain margins in a very competitive market – in spite of Intel's extensive and continuous performance and production enhancements (hence Moore's Law).

Intel's break-through response was to launch the "Intel Inside" (started as "Intel the computer inside") campaign in 1991 and began to build the reputation of Intel from the standpoint of "high performance", "value", and "reliability" [26]. To re-enforce the program Intel launched cooperative marketing campaigns that offered advertising or market development funds to those firms who would market the Intel brand by including an "Intel Inside" logo on every Intel-powered PC. In addition, with the launch of what would have been the 80586 (or 586) in 1993 Intel renamed the product line the Pentium; a name they could own the trademark for.

The results have been astounding for Intel. The Intel brand is currently number 14 (2015) on the list of global brands prepared annually by Interbrand (www.interbrand.com) and published in the Wall Street Journal [53]. Other brands at the top of this list include Coca Cola, IBM, Microsoft, and McDonald's. The power of the Intel brand has not only relegated AMD to the role of a minor player most of the others have fallen by the wayside and Intel-based systems often command a premium in the marketplace.

While Intel was the first company in the electronic circuits industry to successfully brand a consumer offering they are not alone in technology. IBM has also established a powerful global brand that allows them to command a market premium in spite of trailing most technology and performance curves.

Based on the rapid pace of technological innovation, and the complexity of large information technology products, companies fired Chief Technology Officers (CTO) at a frightening rate in the 80's. In fact, at one point, the average tenure of a CTO was less than 18 months. However, IBM carved out a position as the trusted or low risk provider in the industry. This was captured in a mid-80's campaign where they touted that no one ever got fired for choosing IBM – IBM is the low risk choice [38]. This allowed IBM to continue to enjoy success even though they tend to follow rather than lead from a technology/product standpoint.

CONCLUSION

In conclusion, there are many different definitions for innovation and a variety of different models that attempt to capture the complexity that is innovation. However, many definitions in the academic world are not rich enough to operationalize. The models that are popular in industry are richer, and provide for more flexibility in the definition; however, there is no explicit recognition of how these different forms of innovation relate or complement each other and they do not provide an operational framework which will allow managers to drive innovation in tandem with sustained competitive advantage.

In practice we can use strategic planning models such as the I/O model, Porter's Five Forces, and the Resource Based model to both identify attractive markets and identify core competencies that can lead to strategic competitiveness. If we can target the right markets, with the right innovations, this can also lead quite naturally to disruptive innovation and sustainable competitive advantage.

We have demonstrated how the Strategic Marketing Model can be used both as a framework to define innovation, illustrate new forms of innovation, and also identify strategic areas for new innovation. In fact, we can innovate by changing any element of our offering in a way that offers greater value to our customers and/or delivers a competitive edge in the marketplace.

This does not mean that we are always going to be able to win using the Strategic Marketing Model. But, it does mean, that if we understand our market, our competitors, and how they are positioned; along with our own key resources and core competencies; we can find vectors for innovation that are much more powerful in the market then traditional stand-alone product or process based innovation.

REFERENCES

[1] Apple, Inc. Annual Report, 2010
[2] Apple, Inc., Harvard Business School, Boston, MA; HBS 9-708-480, 2008
[3] Boyle, M.; The Accidental Hero (Subway), Businessweek, Nov 2009
[4] Barney, J. B.; Firm Resources and Sustained Competitive Advantage. Journal of Management, Vol. 17, pp.99–120, 1991
[5] Berman, J.; *How Subway Toasted Quizno's in the Sandwich Wars*, Huffington Post, 2014
[6] Bradley, S., Ghemawat, P.; Wal*Mart Stores, Inc., Harvard Business School, Boston, MA; HBS 9-794-024, 2002
[7] Bradley, S., Ghemawat, P., Mark, K.; Wal-Mart Stores in 2003, Harvard Business School, Boston, MA; HBS 9-704-430, 2004
[8] Brown, T.; Change by Design, HarperCollins Publishing, 2009
[9] Business Week Online, Special Report: "Get Creative!", Aug 1, 2005
[10] Chandy, R., Telles, G.; Organizing for Radical Product Innovation: The Overlooked Role of Willingness to Canibalize; Journal of Marketing Research; Vol. XXXV, pp. 474-487, Nov 1998
[11] Christensen, C.; *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*; Harvard Business School Press, 1997
[12] Christensen, C., Overdorf, M.; Meeting the Challenge of Disruptive Change, Harvard Business Review, Boston, MA, Mar – Apr 2000
[13] Christensen, C., M. Raynor; The Innovators Solution, Harvard University Press, 2003
[14] Davidow, W.H.; Marketing High Technology, New York: Free Press, 1986
[15] De Jong, J., Vermeulen, P.; "Determinants of Product Innovation in Small Firms", *International Small Business Journal*, Vol. 24, pp. 587-609, 2006
[16] Doblin Group, The Ten Types of Innovation, corporate website, 1995
[17] Drucker, P.; The Discipline of Innovation, Harvard Business Review, Boston, MA (R0208F), 1985
[18] Economist Intelligence Unit, The Innovators: How Successful Companies Drive Business Transformation, Sep 2008
[19] Eisenmann, T., Herman, K.; Google, Inc., Harvard Business School, Boston, MA; HBS 9-806-105, Nov 2006
[20] Garvin, D., Levesque, L.; Meeting the Challenge of Corporate Entrepreneurship, Harvard Business Review, Oct 2006
[21] Henderson, R.; "Underinvestment and Incompetence as Responses to Radical Innovation: Evidence from the Photolithographic Alignment Equipment Industry," *Rand Journal of Economics* 24, no. 2: 248-270, Summer 1993
[22] Herrmann, A., Tomczak, T., Befurt, R.; "Determinants of Radical Product Innovations", *European Journal of Management*, Vol. 9, pp. 20-43, 2006
[23] Heskett, J., Hallowell, R.; Southwest Airlines: 1993 (A), Harvard Business School, Boston, MA, 1997
[24] Hewlett-Packard, Hewlett Packard Annual Report, 2010
[25] Hitt, M.A., Ireland, R.D., Hoskisson, R.E.; *Strategic Management – Competitiveness and Globalization (Concepts)*, 8th edition; Mason, OH: South–Western, 2009
[26] Intel Corporation; Intel Inside Program, Anatomy of a Brand Campaign (http://www.intel.com/pressroom/intel_inside.htm), 2010
[27] Keeley, L.; Ten Types of Innovation, The Discipline of Building Breakthroughs; John Wiley & Sons, 2013
[28] Kolk, A.; Four levels of innovation: business model, product & service, process, technology; corporate website (www.alarkolk.com), 2010
[29] Milling, P., Stumpfe, J; Product and Process Innovation: A System Dynamics-Based Analysis of the Interdependencies, Industrieseminar der Universität Mannheim, Mannheim, Germany, 2000
[30] Lambert, C.; Disruptive Genius; Harvard Magazine, 2014
[31] Mootee, I.; Types of Innovation, corporate website & Slideshare presentations, 2007
[32] Netmarketshare.com; corporate website, (http://www.netmarketshare.com/browser-market-share.aspx?qprid=1), 2010
[33] North Carolina State University, College of Management; University website, Innovation Defined, 2010
[34] OECD, Eurostat. Oslo Manual: Proposed Guidelines for Collecting and Interpreting Technological Innovation Data, 2nd Edition, The Measurement of Scientific and Technological Activities, OECD Publishing, 1997
[35] OECD, Eurostat. Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data, 3rd Edition, The Measurement of Scientific and Technological Activities, OECD Publishing, 2005
[36] O'Mahony, S., Raj, N.; The Mozilla Foundation: Launching Firefox 1.0 (A), Harvard Business School, Boston, MA; HBS 9-907-015, 2007
[37] Perreault, W.; Cannon, J.; McCarthy, J.; Essentials of Marketing, A Marketing Strategy Planning Approach, 11th Edition; McGraw-Hill Irwin, 2008
[38] Popik, B.; No one ever got fired for buying IBM/Microsoft/Gold (www.barrypopik.com/index.php/new_york_city/entry/no_one_ever_got_fired_for_buying_ibm_microsoft_gold/), Mar 11, 2009
[39] Porter, M.; *Competitive Advantage*, The Free Press, New York, 1985
[40] Porter, M.; *What is Strategy?*, Harvard Business Review, v74 n6, Nov-Dec, 1996
[41] Protolinski, E.; *Chrome Passes 25% Market Share, IE and Firefox Slip*, Venture Beat, http://venturebeat.com/2015/05/01/chrome-passes-25-market-share-ie-and-firefox-slip/, 2015
[42] Red Robin Gourmet Burgers, Annual Report, Feb 25, 2010
[43] Red Robin Gourmet Burgers, Corporate History (www.redrobin.com/aboutus/history.aspx), 2010
[44] RetailSails; McDonald's Inc. Corporate Profile, magazine website, 2010
[45] Rivkin, J., Porter, M.; Matching Dell, Harvard Business School, Boston, MA; HBS 9-799-158, Jan 1999
[46] Roll, M.; Branding and Celebrity Endorsements (Nike), VentureRepublic website (http://www.venturerepublic.com/resources/branding_celebrities_brand_endorsements_brand_leadership.asp), 2010
[47] Rothaermel, F. T.; Strat.Mgmt.: Concepts and Cases, McGraw-Hill/Irwin, 2012

[48] Schumpeter, J.; The Theory of Economic Development, Harvard University Press, 1934

[49] Skarzynski, P., Gibson, R.; Innovating Across the Business Model, Harvard Business Press, 2008

[50] Silver, S.; AT&T Ad Goes After Verizon, E-Gear website (www.e-gear.com/article/actor-luke-wilson-stars-new-anti-verizon-atandt-commercial-414661/1), Nov 2009

[51] USA Today; AT&T sues Verizon Wireless over 'misleading' 3G map coverage ads, Nov 3, 2009

[52] Utterback, J.M., Abernathy, W.J.; A Dynamic Model of Process and Product Innovation, *Omega, The Int. Jl of Mgmt Sci.*, Vol. 3, No. 6, 639–656, 1975

[53] Van de Ven, A.; Central Problems in the Management of Innovation, Management Science, Vol. 32, No. 5, Organization Design pp. 590-607, May 1986

[54] Wall Street Journal; 2010 Global Brands Ranking, Sep. 16, 2010

[55] Yoffie, D.B., Slind, M.; Apple Inc., Harvard Business School, Boston, MA; HBS 9-708-480, 2008

[56] Zehr, W.; Cube Management; Strategic Marketing: How to Crush the Competition and Boost Sales, (http://www.cendix.com/resources.html), Jun 21, 2006

[57] Zehr, W.; Cube Management; Marketing, Branding, and Awareness for a Software Controls Company in the Paper Industry, 2007

[58] Zehr, W.; Strategic Marketing Fundamentals, Oregon Entrepreneurs Network, Executive Series, (http://www.cendix.com/resources.html), Apr 29, 2008

[59] Zehr, W.; Cube Management; Marketing, Branding, and Awareness for a Software Outsourcing Organization, 2008

[60] Zehr, W.; School of Management, Concordia University, SOM 451, April 3, 2009

[61] Zehr, W.; School of Business, Portland State University, BA 495, Pharmaceutical Industry case analysis and lecture based on HBS case 9-703-489, Apr 2010